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10/669,535	09/24/2003	Cliff Evans	60.1532	4628

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Intellectual Property Law Department
Schlumberger-Doll Research
36 Old Quarry Rd.
Ridgefield, CT 06877

EXAMINER

ESTRADA, ANGEL R

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,535

Applicant(s)

EVANS ET AL.

Examiner

Angel R. Estrada

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 19-41 and 46 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 8-16, 18, 43, 47 and 48 is/are allowed.
- 6) ☒ Claim(s) 5-7, 17, 42, 44, 45, 49 and 50 is/are rejected.
- 7) ☒ Claim(s) 51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 5-7 and 17 are withdrawn in view of the newly discovered reference(s) to Koepke (US 5,015,207). Rejections based on the newly cited reference(s) follow.

2. Claims 1-4, 8-16, 18, 43, 47 and 48 are allowed.

Claim 51 would be allowable if rewritten or amended to overcome the rejection(s) under Claim Objections, set forth in this Office action.

The following is an examiner's statement of reasons for allowance: The primary reason for the indication of the allowability of claims 1-4, 8-16, 18, 43, 47, 48 and 51 are:

Regarding claim 2, the prior art does not teach or fairly suggest in combination with the other claimed limitations an electrical feedthru comprising a channel formed in the external surface, wherein the electrically conductive transmission line is disposed in the channel and bonded thereto.

Regarding claims 10, 1, 3, 4, 8, 9, 13, 15, 16, 18 and 47, the prior art does not teach or fairly suggest in combination with the other claimed limitations an electrical feedthru comprising a microchip adhered to the core, wherein the microchip is electrically connected to the electrically conductive transmission line.

Regarding claims 11 and 48, the prior art does not teach or fairly suggest in combination with the other claimed limitations an electrical feedthru comprising a sensor

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chip adhere to the core, wherein the sensor chip is electrically connected to the electrically conductive transmission line.

Regarding claim 12, the prior art does not teach or fairly suggest in combination with the other claimed limitations an electrical feedthru comprising a microchip adhered to the core and electrically connected to the electrically conductive transmission line; wherein the core, the electrically conductive transmission line and the microchip are disposed in a MEMS sensor package.

Regarding claim 14, the prior art does not teach or fairly suggest in combination with the other claimed limitations an electrical feedthru comprising an insulating mold disposed over the electrically conductive transmission lines and the external surface; a sensor chip adhere to the core, wherein the sensor chip is electrically connected to two or more of the plurality of conductive transmission lines.

Regarding claim 43, the prior art does not teach or fairly suggest in combination with the other claimed limitations an electrical feedthru comprising a plurality of channels disposed in the external surface wherein each of the plurality of electrically conductive transmission lines is disposed in one of the plurality of channels and is bonded thereto.

Regarding claim 51, the prior art does not teach or fairly suggest in combination with the other claimed limitations an electrical feedthru comprising a microchip adhere to the core, wherein the microchip is electrically connected to the electrically conductive transmission line; and a channel formed in the external surface, wherein the electrically conductive transmission line is disposed in the channel and bonded thereto.

These limitations are found in claims 1-4, 8-16, 18, 43, 47, 48 and 51, and are neither disclosed nor taught by the prior art of record, alone or in combination.

Claim Objections

3. Claims 51 is objected to because of the following informalities:

Claim 51 line 6, change "transmission line" to --transmission line;--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5-7, 17, 42, 44, 45, 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koepke (US 5,015,207).

Regarding claim 5, Koepke discloses an electrical feedthru apparatus (see figure 1) comprising a core (10 comprising an electrical insulator (column 4 lines 37-40), the core having an external surface (see figure 1); and a plurality of electrically conductive transmission lines (30,32) disposed across a portion of the external surface (see figure 1); and insulating mold (12) disposed over the electrical feedthru (see figure 3a and 3b); but Koepke lacks the mold being shaped to fit into a swage lock. It would have been an obvious matter of design choice to change the shape of the mold to a shape that would fit into a swage lock, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 6, Koepke discloses an electrical feedthru apparatus (see figure 1) comprising a core (10 comprising an electrical insulator (column 4 lines 37-40), the core having an external surface (see figure 1); and a plurality of electrically conductive transmission lines (30,32) disposed across a portion of the external surface (see figure 1); and insulating mold (12) disposed over the electrical feedthru (see figure 3a and 3b); but Koepke lacks the mold comprising a wedge. It would have been an obvious matter of design choice to change the shape of the mold to a shape that would included a wedge, since such a modification would have involved a mere change in the shape of a

component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 7, Koepke discloses an electrical feedthru apparatus (see figure 1) comprising a core (10 comprising an electrical insulator (column 4 lines 37-40), the core having an external surface (see figure 1); and a plurality of electrically conductive transmission lines (30,32) disposed across a portion of the external surface (see figure 1); and insulating mold (12) disposed over the electrical feedthru (see figure 3a and 3b); but Koepke lacks the mold comprising a shoulder. It would have been an obvious matter of design choice to change the shape of the mold to a shape that would included a shoulder, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore this limitation "for bearing against a tightening fastener" has not been giving any patentable weight

Regarding claim 17, Koepke discloses an apparatus (see figure 1) comprising an electrical feedthru (10), the electrical feedthru (10) comprising a core comprising an electrical insulator (column 4 lines 37-40), the core having an external surface (see figure 1); and a plurality of electrically conductive transmission lines (30,32) disposed across a portion of the external surface (see figure 1); and insulating mold (12) disposed over the electrical feedthru (see figure 3a and 3b); but Koepke lacks the core comprising a rod having a first diameter and a shoulder comprising a second diameter larger than the first diameter. It would have been an obvious matter of design choice to change the shape of the core to one having a rod having a first diameter and a shoulder having a second diameter, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Furthermore, Koepke discloses that the electrical feedthru may be formed having a variety of geometric configuration (column 4 lines 7-17).

Regarding claim 42, Koepke discloses an apparatus (see figure 1) comprising an electrical feedthru (10), the electrical feedthru (10) comprising an electrical insulator (column 4 lines 37-40), the electrical feedthru having an external surface (see figure 1); and a plurality of electrically conductive transmission lines (30,32) disposed across a portion of the external surface (see figure 1); the electrical feedthru extending between first and second distinct environment (see figure 1); and insulating over-mold (12)

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disposed over the electrical feedthru (see figres 3a); but Koepke lacks the electrical feddthru having a disk shape. It would have been an obvious matter of design choice to change the shape of the electrical feedthru to a disk shape, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Furthermore, Koepke discloses that the electrical feedthru may be formed having a variety of geometric configuration (column 4 lines 7-17).

Regarding claim 44, Koepke discloses an apparatus (see figure 1) comprising an electrical feedthru (10), the electrical feedthru (10) comprising an electrical insulator (column 4 lines 37-40), the electrical feedthru having an external surface (see figure 1); and a plurality of electrically conductive transmission lines (30,32) disposed across a portion of the external surface (see figure 1); wherein the electrical feedthru comprises a central axis (see figure 1) and a gradually tapered first end; and wherein the plurality of electrically conductive transmission lines is not parallel to the central axis (see figure 1); but Koepke lacks the electrical feddthru having a disk shape. It would have been an obvious matter of design choice to change the shape of the electrical feedthru to a disk shape, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*,

357 F.2d 669, 149 USPQ 47 (CCPA 1966). Furthermore, Koepke discloses that the electrical feedthru may be formed having a variety of geometric configuration (column 4 lines 7-17).

Regarding claim 45, Koepke discloses an apparatus (see figure 1) comprising an electrical feedthru (10), the electrical feedthru (10) comprising an electrical insulator (column 4 lines 37-40), the electrical feedthru having an external surface (see figure 1); and a plurality of electrically conductive transmission lines (30,32) disposed across a portion of the external surface (see figure 1); (see figure 1); an a insulating over mold (12) but Koepke lacks the electrical feedthru having a disk shape and the mold being wedge shaped. It would have been an obvious matter of design choice to change the shape of the electrical feedthru to a disk shape and the mold to a wedge shaped, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Furthermore, Koepke discloses that the electrical feedthru may be formed having a variety of geometric configuration (column 4 lines 7-17).

Regarding claim 49, Koepke discloses an apparatus (see figure 1) comprising an electrical feedthru (10), the electrical feedthru (10) comprising an electrical insulator (column 4 lines 37-40), the electrical feedthru having an external surface (see figure 1); and a plurality of electrically conductive transmission lines (30,32) disposed across a

portion of the external surface (see figure 1); (see figure 1); the electrical feedthru extending between first and second distinct environment (see figures 3a and 3b); wherein the electrical feedthru and the plurality of electrically conductive transmission lines (30, 32) extend between two distinct environment of different pressure (see figures 3a and 3b); but Koepke lacks the electrical feedthru having a disk shape. It would have been an obvious matter of design choice to change the shape of the electrical feedthru to a disk shape, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Furthermore, Koepke discloses that the electrical feedthru may be formed having a variety of geometric configuration (column 4 lines 7-17).

Regarding claim 50, Koepke discloses an apparatus (see figure 1) comprising an electrical feedthru (10), the electrical feedthru (10) comprising a core comprising an electrical insulator (see figure 2a), the core having first and second ends and an external surface (see figure 1); a plurality of electrically conductive transmission lines (30, 32) disposed across a portion of the external surface (see figure 1); but Koepke lacks the first end comprising a gradual taper and the second end being splined. It would have been an obvious matter of design choice to change the shape of the core's first end to a gradual taper shape and the second end being splined, since such a modification would have involved a mere change in the shape of a component. Where

the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Furthermore, Koepke discloses that the electrical feedthru may be formed having a variety of geometric configuration (column 4 lines 7-17).

Response to Arguments

5. Applicant's arguments with respect to claims 42, 44, 45, 49 and 50 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 Ext: 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 30, 2005


Angel R. Estrada
Patent Examiner
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